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* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page for STN Seminar Schedule - N. America
 NEWS  2  JAN 02   STN pricing information for 2008 now available
 NEWS  3  JAN 16   CAS patent coverage enhanced to include exemplified
                   prophetic substances
 NEWS  4  JAN 28   USPATFULL, USPAT2, and USPATOLD enhanced with new
                   custom IPC display formats
 NEWS  5  JAN 28   MARPAT searching enhanced
 NEWS  6  JAN 28   USGENE now provides USPTO sequence data within 3 days
                   of publication
 NEWS  7  JAN 28   TOXCENTER enhanced with reloaded MEDLINE segment
 NEWS  8  JAN 28   MEDLINE and LMEDLINE reloaded with enhancements
 NEWS  9  FEB 08   STN Express, Version 8.3, now available
 NEWS 10  FEB 20   PCI now available as a replacement to DPCI
 NEWS 11  FEB 25   IFIREF reloaded with enhancements
 NEWS 12  FEB 25   IMSPRODUCT reloaded with enhancements
 NEWS 13  FEB 29   WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                   U.S. National Patent Classification
 NEWS 14  MAR 31   IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                   IPC display formats
 NEWS 15  MAR 31   CAS REGISTRY enhanced with additional experimental
                   spectra
 NEWS 16  MAR 31   CA/CAplus and CASREACT patent number format for U.S.
                   applications updated
 NEWS 17  MAR 31   LPCI now available as a replacement to LDPCI
 NEWS 18  MAR 31   EMBASE, EMBAL, and LEMBASE reloaded with enhancements
 NEWS 19  APR 04   STN AnaVist, Version 1, to be discontinued
 NEWS 20  APR 15   WPIDS, WPINDEX, and WPIX enhanced with new
                   predefined hit display formats
 NEWS 21  APR 28   EMBASE Controlled Term thesaurus enhanced
 NEWS 22  APR 28   IMSRESEARCH reloaded with enhancements
 NEWS 23  MAY 30   INPAFAMDB now available on STN for patent family
                   searching
 NEWS 24  MAY 30   DGENE, PCTGEN, and USGENE enhanced with new homology
                   sequence search option
 NEWS 25  JUN 06   EPFULL enhanced with 260,000 English abstracts
 NEWS 26  JUN 06   KOREAPAT updated with 41,000 documents
 NEWS 27  JUN 13   USPATFULL and USPAT2 updated with 11-character
                   patent numbers for U.S. applications
 NEWS 28  JUN 19   CAS REGISTRY includes selected substances from
                   web-based collections
 NEWS 29  JUN 25   CA/CAplus and USPAT databases updated with IPC
                   reclassification data
 NEWS 30  JUN 30   AEROSPACE enhanced with more than 1 million U.S.
                   patent records
 NEWS 31  JUN 30   EMBASE, EMBAL, and LEMBASE updated with additional
                   options to display authors and affiliated
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                organizations
 NEWS 32  JUN 30  STN on the Web enhanced with new STN AnaVist
                  Assistant and BLAST plug-in
 NEWS 33  JUN 30  STN AnaVist enhanced with database content from EPFULL

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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FILE 'HOME' ENTERED AT 13:15:36 ON 03 JUL 2008

=> index bioscience medicine
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.63       0.63

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
       AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
       CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
       DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 13:17:18 ON 03 JUL 2008

72 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s nitril?(s)hydratas?
         47   FILE AGRICOLA
          5   FILE ANABSTR
          3   FILE ANTE
          2   FILE AQUALINE
          7   FILE AQUASCI
        140   FILE BIOENG
        439   FILE BIOSIS
        419   FILE BIOTECHABS
        419   FILE BIOTECHDS
        176   FILE BIOTECHNO
         46   FILE CABA
        907   FILE CAPLUS
        114   FILE CEABA-VTB
          6   FILE CIN
         19   FILE CONFSCI
          3   FILE CROPU
       1193   FILE DGENE
         24   FILE DISSABS
          1   FILE DRUGU
          3   FILE EMBAL
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        280   FILE EMBASE
        209   FILE ESBIOBASE
          2   FILE FROSTI
          5   FILE FSTA
       1871   FILE GENBANK
        163   FILE IFIPAT
        212   FILE LIFESCI
        252   FILE MEDLINE
          1   FILE NTIS
        248   FILE PASCAL
         36   FILE PCTGEN
         12   FILE PROMT
        717   FILE SCISEARCH
        136   FILE TOXCENTER
        892   FILE USGENE
        443   FILE USPATFULL
         82   FILE USPAT2
          2   FILE WATER
        208   FILE WPIDS
          6   FILE WPIFV
  68 FILES SEARCHED...
        208   FILE WPINDEX
          8   FILE NLDB

  42 FILES HAVE ONE OR MORE ANSWERS,   72 FILES SEARCHED IN STNINDEX

L1   QUE NITRIL?(S) HYDRATAS?

=> d rank
F1         1871   GENBANK
F2         1193   DGENE
F3          907   CAPLUS
F4          892   USGENE
F5          717   SCISEARCH
F6          443   USPATFULL
F7          439   BIOSIS
F8          419   BIOTECHABS
F9          419   BIOTECHDS
F10         280   EMBASE
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F13         212   LIFESCI
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F15         208   WPIDS
F16         208   WPINDEX
F17         176   BIOTECHNO
F18         163   IFIPAT
F19         140   BIOENG
F20         136   TOXCENTER
F21         114   CEABA-VTB
F22          82   USPAT2
F23          47   AGRICOLA
F24          46   CABA
F25          36   PCTGEN
F26          24   DISSABS
F27          19   CONFSCI
F28          12   PROMT
F29           8   NLDB
F30           7   AQUASCI
F31           6   CIN
F32           6   WPIFV
F33           5   ANABSTR
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F34             5   FSTA
F35             3   ANTE
F36             3   CROPU
F37             3   EMBAL
F38             2   AQUALINE
F39             2   FROSTI
F40             2   WATER
F41             1   DRUGU
F42             1   NTIS


=> file f3-f14
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                               ENTRY     SESSION
FULL ESTIMATED COST                             5.20       5.83

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=> s nitril?(s)hydratas?
L2          5018 NITRIL?(S) HYDRATAS?

=> s l2(s)(bacter? or microb? or prokar? or thermophil?)
   9 FILES SEARCHED...
L3          1365 L2(S)(BACTER? OR MICROB? OR PROKAR? OR THERMOPHIL?)
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=> s l3(s)(modif? or muta? or modif? or substit? or repla? or recombin?)
   9 FILES SEARCHED...
L4          442 L3(S)(MODIF? OR MUTA? OR MODIF? OR SUBSTIT? OR REPLA? OR RECOMB
                IN?)

=> s l4(s)thermophila?
L5          256 L4(S) THERMOPHILA?

=> dup rem l5
DUPLICATE IS NOT AVAILABLE IN 'USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L5
L6           248 DUP REM L5 (8 DUPLICATES REMOVED)

=> s l5 and (position(s)(36## or 71## or 148## or 204## or 10## or 32## or 37## or
41## or 46## or 48## or 51## or 72## or 118## or 127## or 146## or 160## or 186##
or 217## or 108## or 212## or 6## or 19## or 126##))
TERM '6##' EXCEEDED TRUNCATION LIMITS - SEARCH ENDED
You have entered a truncated stem which occurs in too many terms.
Make the stem longer and try again.  For example, if your original
term was 'degr?' to search for variations and the abbreviation for
'degradation', you could replace it with the expression '(degrdn OR
degrad?)'.  If your search term was numeric, e.g., 'C>5', reduce the
size of the range.

=> s l5 and (position(s)(36## or 71## or 148## or 204## or 10## or 32## or 37## or
41## or 46## or 48## or 51## or 72## or 118## or 127## or 146## or 160## or 186##
or 217## or 108## or 212## or 19## or 126##))
TERM '10##' EXCEEDED TRUNCATION LIMITS - SEARCH ENDED
You have entered a truncated stem which occurs in too many terms.
Make the stem longer and try again.  For example, if your original
term was 'degr?' to search for variations and the abbreviation for
'degradation', you could replace it with the expression '(degrdn OR
degrad?)'.  If your search term was numeric, e.g., 'C>5', reduce the
size of the range.

=> s l5 and (position(s)(36th or 71st or 148th or 204th or 10th or 32nd or 37th or
41st or 46th or 48th or 51st or 72nd or 118th or 127th or 146th or 160th or 186th
or 217th or 108th or 212nd or 19th or 126th))
   9 FILES SEARCHED...
L7            2 L5 AND (POSITION(S)(36TH OR 71ST OR 148TH OR 204TH OR 10TH OR
                32ND OR 37TH OR 41ST OR 46TH OR 48TH OR 51ST OR 72ND OR 118TH
                OR 127TH OR 146TH OR 160TH OR 186TH OR 217TH OR 108TH OR 212ND
                OR 19TH OR 126TH))

=> s l5 and (position(s)(36 or 71 or 148 or 204 or 10 or 32 or 37 or 41 or 46 or 48
or 51 or 72 or 118 or 127 or 146 or 160 or 186 or 217 or 108 or 212 or 19 or 126))
   6 FILES SEARCHED...
L8            4 L5 AND (POSITION(S)(36 OR 71 OR 148 OR 204 OR 10 OR 32 OR 37
                OR 41 OR 46 OR 48 OR 51 OR 72 OR 118 OR 127 OR 146 OR 160 OR
                186 OR 217 OR 108 OR 212 OR 19 OR 126))

=> d ibib abs l7 1-2

L7   ANSWER 1 OF 2  USPATFULL on STN
ACCESSION NUMBER:       1999:65189  USPATFULL
TITLE:                  Nitrile hydratase
INVENTOR(S):            Ito, Kiyoshi, Mobara, Japan
                        Yamaki, Toshifumi, Mobara, Japan
                        Arii, Teruo, Chiba, Japan
                        Tsuruoka, Miyuki, Yachimata, Japan
```

Nakamura, Takeshi, Ichihara, Japan
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5910432		19990608
APPLICATION INFO.:	US 1997-990818		19971215 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-800751, filed on 14 Feb 1997, now patented, Pat. No. US 5807730

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1996-27004	19960214

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Bugaisky, Gabriele E.
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 4325
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides the amino acid sequence and base sequence of a Pseudonocardia thermophila-derived nitrile hydratase, provides further a method for changing its amino acid sequence and base sequence without substantially changing the functions of said nitrile hydratase, and nitrile hydratases having a base sequence and an amino acid sequence as changed on the basis of said method, and provides furthermore a recombinant plasmid having the gene of said nitrile hydratase, a transformant containing said recombinant plasmid, a method of using said transformant for producing said enzyme, and a method of using said transformant for producing the corresponding amide compound from a nitrile compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 2 USPATFULL on STN
ACCESSION NUMBER: 1998:111815 USPATFULL
TITLE: Nitrile hydratase
INVENTOR(S): Ito, Kiyoshi, Mobara, Japan
Yamaki, Toshifumi, Mobara, Japan
Arii, Teruo, Chiba, Japan
Tsuruoka, Miyuki, Yachimata, Japan
Nakamura, Takeshi, Ichihara, Japan
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5807730		19980915
APPLICATION INFO.:	US 1997-800751		19970214 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1996-27004	19960214

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Bugaisky, Gabriele E.

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 4086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the amino acid sequence and base sequence of a Pseudonocardia thermophila-derived nitrile hydratase, provides further a method for changing its amino acid sequence and base sequence without substantially changing the functions of said nitrile hydratase, and nitrile hydratases having a base sequence and an amino acid seguence as changed on the basis of said method, and provides furthermore a recombinant plasmid having the gene of said nitrile hydratase, a transformant containing said recombinant plasmid, a method of using said transformant for producing said enzyme, and a method of using said transformant for producing the corresponding amide compound from a nitrile compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ibib abs l8 1-4

L8 ANSWER 1 OF 4 USPATFULL on STN
ACCESSION NUMBER: 2007:11574 USPATFULL
TITLE: Novel nitrile hydratase
INVENTOR(S): Yamaki, Toshifumi, Mobara-shi, JAPAN
Banba, Shinichi, Mobara-shi, JAPAN
Matoishi, Kaori, Mobara-shi, JAPAN
Ito, Kiyoshi, Sodegaura-shi, JAPAN
Kobayashi, Hideki, Mobara-shi, JAPAN
Tanaka, Eishi, Sodegaura-shi, JAPAN
Oikawa, Toshihiro, Mobara-shi, JAPAN
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Minato-ku, JAPAN, 105-7117 (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20070009985	A1	20070111	
APPLICATION INFO.:	US 2003-539560	A1	20031215	(10)
	WO 2003-JP16014		20031215	
			20050617	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-368360	20021219
	JP 2003-379280	20031110

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BUCHANAN, INGERSOLL & ROONEY PC, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404, US
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 12017
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The amino acid sequence of a mutant which is obtained by introducing a novel mutation into a Pseudonocardia thermophila JCM3095-derived nitrile hydratase consisting of two types of heterogeneous subunits, and the base sequence of the gene are provided. The nitrile hydratase is

modified by specifying the region to be modified in the stereostructure/amino acid sequence of the nitrile hydratase, and applying alteration such as substitution , insertion, deletion or the like, to the amino acids in the amino acid sequence which are corresponding to the amino acid residues forming the region. Also provided is a method for modifying an enzyme having a nitrile hydratase activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 4 USPATFULL on STN

ACCESSION NUMBER:	1999:65189 USPATFULL
TITLE:	Nitrile hydratase
INVENTOR(S):	Ito, Kiyoshi, Mobara, Japan Yamaki, Toshifumi, Mobara, Japan Arii, Teruo, Chiba, Japan Tsuruoka, Miyuki, Yachimata, Japan Nakamura, Takeshi, Ichihara, Japan
PATENT ASSIGNEE(S):	Mitsui Chemicals, Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5910432		19990608
APPLICATION INFO.:	US 1997-990818		19971215 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1997-800751, filed on 14 Feb 1997, now patented, Pat. No. US 5807730		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1996-27004	19960214

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Wax, Robert A.
ASSISTANT EXAMINER:	Bugaisky, Gabriele E.
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis, L.L.P.
NUMBER OF CLAIMS:	25
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:	4325

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides the amino acid sequence and base sequence of a Pseudonocardia thermophila-derived nitrile hydratase, provides further a method for changing its amino acid sequence and base sequence without substantially changing the functions of said nitrile hydratase, and nitrile hydratases having a base sequence and an amino acid sequence as changed on the basis of said method, and provides furthermore a recombinant plasmid having the gene of said nitrile hydratase, a transformant containing said recombinant plasmid, a method of using said transformant for producing said enzyme, and a method of using said transformant for producing the corresponding amide compound from a nitrile compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 4 USPATFULL on STN

ACCESSION NUMBER:	1998:111815 USPATFULL
TITLE:	Nitrile hydratase
INVENTOR(S):	Ito, Kiyoshi, Mobara, Japan Yamaki, Toshifumi, Mobara, Japan Arii, Teruo, Chiba, Japan

Tsuruoka, Miyuki, Yachimata, Japan
Nakamura, Takeshi, Ichihara, Japan
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5807730		19980915
APPLICATION INFO.:	US 1997-800751		19970214 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1996-27004	19960214

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Bugaisky, Gabriele E.
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 4086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides the amino acid sequence and base sequence of a Pseudonocardia thermophila-derived nitrile hydratase, provides further a method for changing its amino acid sequence and base sequence without substantially changing the functions of said nitrile hydratase, and nitrile hydratases having a base sequence and an amino acid sequence as changed on the basis of said method, and provides furthermore a recombinant plasmid having the gene of said nitrile hydratase, a transformant containing said recombinant plasmid, a method of using said transformant for producing said enzyme, and a method of using said transformant for producing the corresponding amide compound from a nitrile compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 4 BIOTECHDS COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-23874 BIOTECHDS
TITLE: Novel cobalt type nitrile hydratase containing subunit coupled with cobalt atom through specific amino acid sequence, useful for producing amide compound; recombinant enzyme production and vector expression in host cell for use in amide compound production
PATENT ASSIGNEE: MITSUI CHEM INC
PATENT INFO: JP 2004261105 24 Sep 2004
APPLICATION INFO: JP 2003-55481 3 Mar 2003
PRIORITY INFO: JP 2003-55481 3 Mar 2003; JP 2003-55481 3 Mar 2003
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
OTHER SOURCE: WPI: 2004-672173 [66]
AN 2004-23874 BIOTECHDS
AB DERWENT ABSTRACT:
NOVELTY - A cobalt type nitrile hydratase (I) containing a subunit coupled with cobalt atom through a specific amino acid sequence, as a component, is new.
DETAILED DESCRIPTION - A cobalt type nitrile hydratase (I) contains a subunit coupled with cobalt atom through an amino acid sequence such as Cys-Ser-Leu-Csi-Ser-Cse, as a component, where Csi represents cysteine sulfinic acid and Cse represents cysteine sulfenic acid. An INDEPENDENT CLAIM is also included for a transformed

strain (II) comprising (I), the culture solution of the strain, or its treated substance.

BIOTECHNOLOGY - Preferred Hydratase: (I) comprises an alpha subunit derived from Pseudonocardia thermophila. The cobalt atom binding domain in alpha subunit (ST1) of (I) comprises a sequence of Cys-Thr-Leu-Csi-Ser-Cse, where the Thr residue is substituted by a Ser residue, such that ST1 binds with cobalt atom through a region having a sequence of Cys-Ser-Leu-Csi-Ser-Cse, where ST1 comprises a fully defined sequence of 205 amino acids (S1) as given in the specification or an amino acid sequence comprising (S1) in which one or more amino acids are deleted, substituted or added excluding sequences from position 108-113 of (S1).
(I) comprises ST1 and a subunit (ST2) comprising a fully defined sequence of 233 amino acids (S2) as given in the specification, or a sequence comprising (S2) in which one or more amino acids are deleted, substituted or added.

USE - (I) or (II) is useful for producing amide compound, which involves contacting (I) or (II), the culture solution of (II) or its treated substance with nitrile compound in an aqueous medium (claimed).

ADVANTAGE - (I) enables production of amide compound (claimed).

EXAMPLE - Strain MT-10822 was inoculated into a LB culture medium, cultivated at 37 degreesC for 20 hours, centrifuged for 5 minutes and a plasmid pPT-DB1 was prepared from the DNA of the microbial cells. The plasmid pPT-DB1 was taken as a template and PCR was performed twice using the sequences such as 5'-gcaggagcagagcgagcaca-3' and 5'-caggaaacagctatgac-3', and 5'-ggccagtgcctagcttacat-3' and 5'-gttttcccagtcacgac-3'. The products obtained by the PCR were annealed at 37 degreesC, amplified by PCR using the primers having sequences such as 5'-caggaaacagctatgac-3' and 5'-gttttcccagtcacgac-3', and the amplified DNA fragment obtained by the process was subjected to restriction enzyme digestion using EcoRI and HindIII. The pPT-DB1 prepared by the above mentioned process was subjected to restriction enzyme digestion using EcoRI and HindIII, ligated with the amplified fragment, and introduced into Escherichia coli HB101 strain. The transformed organism was cultivated in LB medium containing ferric sulfate heptahydrate (40 microg/ml) and cobalt chloride dihydrate (10 microg/ml) at 37 degreesC for 20 hours.
The microbial cells were crushed by ultrasonic crusher, and an enzyme extract having nitrile hydratase activity was obtained. (19 pages)

=> d his full

(FILE 'HOME' ENTERED AT 13:15:36 ON 03 JUL 2008)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 13:17:18 ON 03 JUL 2008

SEA NITRIL?(S)HYDRATAS?

47	FILE AGRICOLA
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140	FILE BIOENG
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419	FILE BIOTECHABS
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              176   FILE BIOTECHNO
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              907   FILE CAPLUS
              114   FILE CEABA-VTB
                6   FILE CIN
               19   FILE CONFSCI
                3   FILE CROPU
             1193   FILE DGENE
               24   FILE DISSABS
                1   FILE DRUGU
                3   FILE EMBAL
              280   FILE EMBASE
              209   FILE ESBIOBASE
                2   FILE FROSTI
                5   FILE FSTA
             1871   FILE GENBANK
              163   FILE IFIPAT
              212   FILE LIFESCI
              252   FILE MEDLINE
                1   FILE NTIS
              248   FILE PASCAL
               36   FILE PCTGEN
               12   FILE PROMT
              717   FILE SCISEARCH
              136   FILE TOXCENTER
              892   FILE USGENE
              443   FILE USPATFULL
               82   FILE USPAT2
                2   FILE WATER
              208   FILE WPIDS
                6   FILE WPIFV
              208   FILE WPINDEX
                8   FILE NLDB
L1              QUE NITRIL?(S) HYDRATAS?
                ---------
                D RANK

     FILE 'CAPLUS, USGENE, SCISEARCH, USPATFULL, BIOSIS, BIOTECHDS, EMBASE,
     MEDLINE, PASCAL, LIFESCI, ESBIOBASE' ENTERED AT 13:21:57 ON 03 JUL 2008
L2          5018 SEA NITRIL?(S) HYDRATAS?
L3          1365 SEA L2(S)(BACTER? OR MICROB? OR PROKAR? OR THERMOPHIL?)
L4           442 SEA L3(S)(MODIF? OR MUTA? OR MODIF? OR SUBSTIT? OR REPLA? OR
                 RECOMBIN?)
L5           256 SEA L4(S) THERMOPHILA?
L6           248 DUP REM L5 (8 DUPLICATES REMOVED)
L7             2 SEA L5 AND (POSITION(S)(36TH OR 71ST OR 148TH OR 204TH OR 10TH
                 OR 32ND OR 37TH OR 41ST OR 46TH OR 48TH OR 51ST OR 72ND OR
                 118TH OR 127TH OR 146TH OR 160TH OR 186TH OR 217TH OR 108TH OR
                 212ND OR 19TH OR 126TH))
L8             4 SEA L5 AND (POSITION(S)(36 OR 71 OR 148 OR 204 OR 10 OR 32 OR
                 37 OR 41 OR 46 OR 48 OR 51 OR 72 OR 118 OR 127 OR 146 OR 160
                 OR 186 OR 217 OR 108 OR 212 OR 19 OR 126))
                 D IBIB ABS L7 1-2
                 D IBIB ABS L8 1-4


     FILE HOME

     FILE STNINDEX

     FILE CAPLUS
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